

--62. The method as claimed in claim 61 wherein said clamping circuit is directly connected to said power transformer.--

--63. The method as claimed in claim 61 wherein said clamping circuit is coupled to a primary winding of said power transformer.--

--64. The method as claimed in claim 61 wherein said power transformer has a center-tapped secondary winding.--

--65. The method as claimed in claim 61 further comprising connecting a primary winding of said power transformer to an input of said power converter during a first cyclic interval of said power converter.--

--66. The method as claimed in claim 61 further comprising a further synchronous rectification device, coupled to said power transformer, that is active during a first cyclic interval of said power converter.--

--67. The method as claimed in claim 61 further comprising a rectification device, coupled to said power transformer, that is active during a first cyclic interval of said power converter.--

--68. The method as claimed in claim 61 wherein said clamping circuit comprises a switching device connected in series with a capacitor.--

--69. The method as claimed in claim 68 further comprising controlling said switching device with a control circuit.--

--70. The method as claimed in claim 61 wherein said power converter operates in one of:

- a forward mode,
- a flyback mode, and
- a forward/flyback mode.--

--71. A method of operating a power converter, comprising:  
providing a power transformer having a plurality of windings;  
coupling a synchronous rectification device, having a control terminal, to at least one of said plurality of windings;

coupling a clamping circuit to said at least one of said plurality of windings; and  
limiting a voltage applied to said control terminal with said clamping circuit such that said synchronous rectification device is active for substantially all of a clamping interval.--

--72. The method as claimed in claim 71 wherein said clamping circuit is directly connected to said power transformer.--

--73. The method as claimed in claim 71 wherein said clamping circuit is coupled to a primary winding of said power transformer.--

--74. The method as claimed in claim 71 wherein said power transformer has a center-tapped secondary winding.--

--75. The method as claimed in claim 71 further comprising connecting a primary winding of said power transformer to an input of said power converter during a first cyclic interval of said power converter.--

--76. The method as claimed in claim 71 further comprising a further synchronous rectification device, coupled to said power transformer, that is active during a first cyclic interval of said power converter.--

--77. The method as claimed in claim 71 further comprising a rectification device, coupled to said power transformer, that is active during a first cyclic interval of said power converter.--

--78. The method as claimed in claim 71 wherein said clamping circuit comprises a switching device connected in series with a capacitor.--

--79. The method as claimed in claim 78 further comprising controlling said switching device with a control circuit.--

--80. The method as claimed in claim 71 wherein said power converter operates in one of:

a forward mode,

a flyback mode, and

a forward/flyback mode.--

--81. A method of operating a power converter, comprising:  
providing a power transformer having a plurality of windings;  
coupling a synchronous rectification device, having a control terminal, to at least one of said plurality of windings;

coupling a clamping circuit to said at least one of said plurality of windings; and

limiting a voltage applied to said control terminal with said clamping circuit such that said synchronous rectification device conducts a load current for substantially all of a clamping interval.--

--82. The method as claimed in claim 81 wherein said clamping circuit is directly connected to said power transformer.--

--83. The method as claimed in claim 81 wherein said clamping circuit is coupled to a primary winding of said power transformer.--

--84. The method as claimed in claim 81 wherein said power transformer has a center-tapped secondary winding.--

--85. The method as claimed in claim 81 further comprising connecting a primary winding of said power transformer to an input of said power converter during a first cyclic interval of said power converter.--

--86. The method as claimed in claim 81 further comprising a further synchronous rectification device, coupled to said power transformer, that is active during a first cyclic interval of said power converter.--

--87. The method as claimed in claim 81 further comprising a rectification device, coupled to said power transformer, that is active during a first cyclic interval of said power converter.--

--88. The method as claimed in claim 81 wherein said clamping circuit comprises a switching device connected in series with a capacitor.--

--89. The method as claimed in claim 88 further comprising controlling said switching device with a control circuit.--

--90. The method as claimed in claim 81 wherein said power converter operates in one of:

a forward mode,

a flyback mode, and

a forward/flyback mode.--

--91. A method of operating a power converter, comprising:  
providing a power transformer having a plurality of windings;  
coupling a synchronous rectification device, having a control terminal responsive to a drive signal, to at least one of said plurality of windings;  
coupling a clamping circuit to said at least one of said plurality of windings; and  
limiting said drive signal applied to said control terminal with said clamping circuit such that said drive signal is continuous for substantially all of a clamping interval.--

--92. The method as claimed in claim 91 wherein said clamping circuit is directly connected to said power transformer.--

--93. The method as claimed in claim 91 wherein said clamping circuit is coupled to a primary winding of said power transformer.--

--94. The method as claimed in claim 91 wherein said power transformer has a center-tapped secondary winding.--

--95. The method as claimed in claim 91 further comprising connecting a primary winding of said power transformer to an input of said power converter during a first cyclic interval of said power converter.--

--96. The method as claimed in claim 91 further comprising a further synchronous rectification device, coupled to said power transformer, that is active during a first cyclic interval of said power converter.--

--97. The method as claimed in claim 91 further comprising a rectification device, coupled to said power transformer that is active during a first cyclic interval of said power converter.--

--98. The method as claimed in claim 91 wherein said clamping circuit comprises a switching device connected in series with a capacitor.--

--99. The method as claimed in claim 98 further comprising controlling said switching device with a control circuit.--

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--100. The method as claimed in claim 91 wherein said power converter operates in one of:

a forward mode,  
a flyback mode, and  
a forward/flyback mode.--

--101. A method of operating a power converter, comprising:  
accepting a DC voltage at an input of said power converter;  
providing current to a load coupled to an output of said power converter;  
transforming a voltage from said input to said output with a power transformer having at least one primary winding and at least one secondary winding;  
periodically connecting said input to said at least one primary winding during a first cyclic interval of said power converter;  
limiting said voltage across said at least one secondary winding with a clamping circuit during a clamping interval of said power converter; and  
rectifying said voltage with a synchronous rectification device having a control terminal responsive to a signal across said at least one secondary winding such that said synchronous rectification device is active for substantially all of said clamping interval.--

--102. The method as claimed in claim 101 wherein said clamping circuit is directly connected to said power transformer.--



--103. The method as claimed in claim 101 wherein said clamping circuit is coupled to said at least one primary winding of said power transformer.--

--104. The method as claimed in claim 101 wherein said at least one secondary winding has a center-tap.--

--105. The method as claimed in claim 101 further comprising a voltage limiting device coupled to said synchronous rectification device.--

--106. The method as claimed in claim 101 further comprising a further synchronous rectification device, coupled to said power transformer, that is active during a first cyclic interval of said power converter.--

--107. The method as claimed in claim 101 further comprising a rectification device, coupled to said power transformer, that is active during a first cyclic interval of said power converter.--

--108. The method as claimed in claim 101 wherein said clamping circuit comprises a switching device connected in series with a capacitor.--

--109. The method as claimed in claim 108 further comprising controlling said switching device with a control circuit.--

--110. The method as claimed in claim 101 wherein said power converter operates in one

of:

a forward mode, ~~B~~

a flyback mode, and

a forward/flyback mode.--

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